

# PONDS

## Proactive Options with Neighbors for Defense-installation Sustainability

ERDC/CERL TN-04-3

June 2004

### Background

Military installations and surrounding communities have historically functioned as independent entities with separate schools, libraries, parks and transportation systems. This is partly due to the conscious placement of military installations far from cities and towns because of installations' need for vast tracks of land for training, airfields, and other specialized uses. Development near and around military installations is occurring at a rapid rate. As a result, communities have a much greater opportunity to share resources such as utilities, schools, and recreational facilities.

However, land use conflicts between the installations and surrounding communities are on the rise because urban development near and around military installations can encroach upon the installation and disrupt its functions and training capabilities. Nearby communities often express concerns about safety, noise, night training, flight zones and other military activities that affect them.

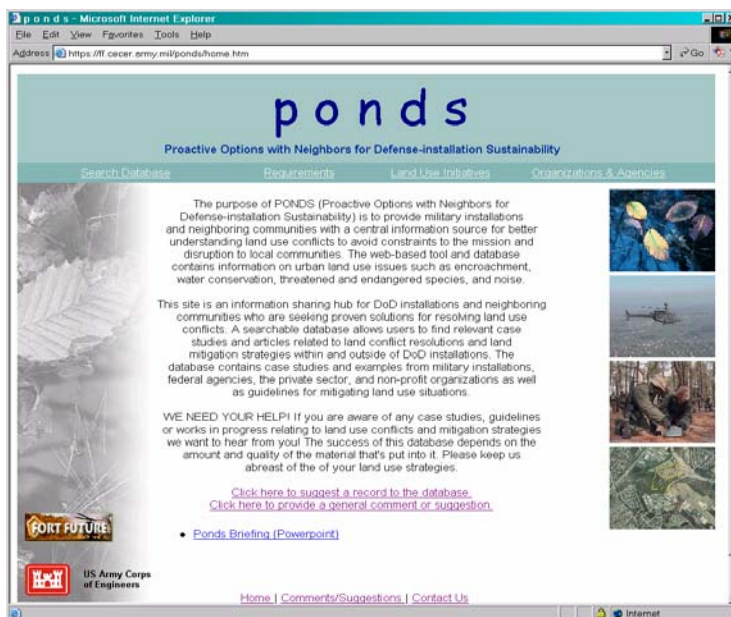
Installation and community planners commonly have a difficult time finding what others have done in response to the problems created by incompatible land use. Regional issues such as quality and availability of water, air quality, and management of habitat for threatened and endangered species can affect the long-term sustainability of both the installation and surrounding communities.

The National Governors Association (NGA) recognizes how incompatible land use can pressure military installations and surrounding communities:

Incompatible residential and commercial development of land close to military installations can affect the ability of an installation to carry out its mission. Such development also threatens public safety

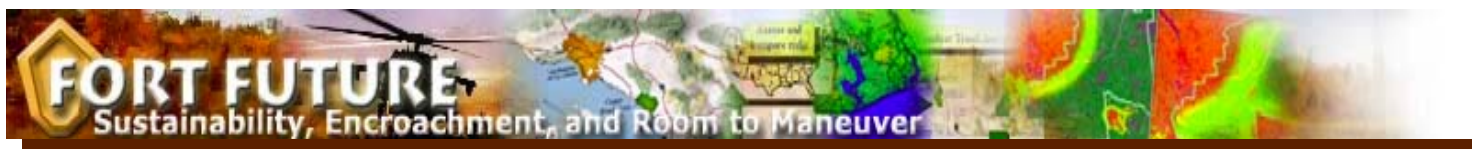
because accidents sometimes occur in the areas surrounding an installation. The economic health of a community is affected if military operations and missions must relocate because of urban encroachment. States and local governments have begun to take actions to prevent encroachment and more measures are likely with heightened concerns about national security and economic health.\*

The Proactive Options with Neighbors for Defense-installation Sustainability (PONDS) web-based tool (below) provides resources and case studies to help nurture relationships between military installations and their neighbors by promoting opportunities for planning and partnering. For example, communities can work with the military installations to create regional transportation plans or mass transit systems to mitigate air pollution caused by traffic and congestion.



PONDS web site home page.

\*"Military Installations Pressured by Sprawl," *National Governor's Association Center for Best Practices: Center Online*, accessed 25 May 2004 via URL: <http://www.nga.org/>



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**Urban development can encroach upon military installations, disrupting their functions and limiting training capabilities.**

## Growing Cooperation

As military installations and surrounding communities have grown closer, their relationship has changed, and the mutual benefits to be drawn from cooperative planning have grown. The privatization of functions such as utilities and housing offers installations and communities opportunities to share existing resources, plan for the future, and deal collectively with land use conflicts. In the “Residential Communities Initiative,” for example (<http://rci.army.mil/>), private sector developers work with installations to provide military family housing. The military as well as state and local communities have initiated programs to proactively support joint planning efforts between installations and communities. The Department of Defense (DoD) created the Joint Land Use Study (JLUS) program to encourage compatible development and planning measures between installations and neighboring communities. States and municipalities can mitigate land use conflicts by working with neighboring installations and amending zoning and building codes.

PONDS was initiated to provide guidelines and information to military installations and their neighbors that want to plan for the future and effectively deal with land use issues. Libraries, government offices, and the World-Wide Web offer a great deal of information on this subject, but as yet no central information repository exists to educate the military and neighboring communities on collaborative planning land use mitigation strategies.

## Approach

The purpose of PONDS is to provide the military and neighboring communities with a central information source to help encourage partnering opportunities and resolve land use conflicts. The web-based tool and database contains information on a wide variety of land use issues such as encroachment, water conservation, threatened and endangered species, and noise.

The PONDS website is an information sharing hub for DoD installations and neighboring communities who are seeking proven solutions for resolving land use conflicts. A searchable database allows users to find relevant case studies and articles on land conflict resolutions and land mitigation strategies within and outside of DoD installations.

The database contains case studies and examples from military installations, Federal agencies, the private sector, and non-profit organizations. PONDS is searchable by military or non-military examples, by region (via color-designated map), or by location, type of study, stakeholder, mitigation strategy employed, or topic (using dropdown lists). Example topics include resources such as water, air, and threatened and endangered species or land use issues such as sprawl and encroachment (see the illustration on the following page).

The PONDS website was designed with a consistent menu bar across the top with the following categories: Search Database, Requirements, Land Use Initiatives, and Organizations and Agencies. PONDS contains guidelines written by experts in the field for installations and their neighbors to use to address similar situations in their own locales.

The Requirements section uses ListBuilder, a searchable database of environmental regulatory compliance protocols. DoD, Fish & Wildlife, NASA, other Federal agencies use these compliance protocols to ensure compliance with State and Federal environmental requirements. ListBuilder for PONDS will provide planners and managers with ready access to the regulatory requirements that may affect interactions between the installation and the surrounding community.

Topics
<ul style="list-style-type: none"> <li>Sprawl</li> <li>Water quality</li> <li>Air quality</li> <li>Noise</li> <li>Threatened &amp; endangered species</li> <li>Smart growth</li> <li>Urban encroachment</li> <li>Community design</li> <li>Brownfields redevelopment</li> <li>Land use conflicts</li> <li>Regional planning</li> <li>Sustainability</li> <li>Local community</li> <li>Military</li> </ul>
Mitigation Strategies
<ul style="list-style-type: none"> <li>Conservation easements</li> <li>Revise local comprehensive plans</li> <li>Zoning</li> <li>Amend building codes</li> <li>Regional cooperative partnerships</li> <li>Land acquisition</li> <li>Purchase development rights</li> <li>Revised community design standards</li> <li>Financial incentives</li> <li>Policy changes</li> <li>Joint Land Use Study</li> <li>Other</li> </ul>
Stakeholders
<ul style="list-style-type: none"> <li>Military installations</li> <li>Local communities</li> <li>Regional planning agencies</li> <li>Policymakers</li> <li>Other interest groups</li> </ul>
Study Type
<ul style="list-style-type: none"> <li>Case study</li> <li>Guidelines</li> <li>Joint Land Use Study</li> <li>Other</li> </ul>

**PONDS - Microsoft Internet Explorer**

File Edit View Favorites Tools Help

Address <http://asterix.cecer.army.mil:8080/ponds/casestudies.jsp>

### Case Studies and Guidelines Data Base

For best results choose a criterion for only one or two of the fields at one time leaving the remaining categories as the default "All". Narrowing the search too much may produce a "no records found" result. Click the Help button for more help.

Military: ☒ All ☐ Non-Military

Region:

State Specific:

Study Type:

Topic:

Stakeholder:


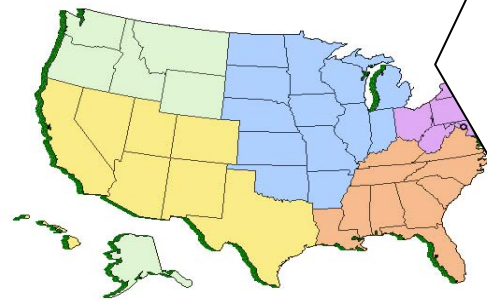
Mitigation Strategy:

Article Title:

Author:

Year:

Select from pick list or click map to select region only

The Land Use Initiatives section includes military and non-military tools and strategies for proactively managing land use issues such as the JLUS and the Private Lands Initiative (PLI).

The Organizations and Agencies section links to relevant government agencies and other organizations involved in planning, Smart Growth, sustainability, and other issues relevant to this project. These groups may be stakeholders, mediating agencies, or interested parties featured in the case studies or in mitigating land use issues.

The PONDS team feels strongly that the success of this effort depends on the quality of the information that the website contains. User input is encouraged. A "Comment" button allows website users to contact the PONDS team with questions, comments, or suggestions for articles or case studies for the database.

PONDS is part of a larger ERDC effort called "Sustainability, Encroachment, and Room to Maneuver" (SERM), which is an integrated part of the Fort Future Program. The purpose of SERM is to develop "new tools and approaches to help maintain the traditional and future operations planned for installations. The program is developing tools, data, and analyses to support decision-making at national, regional, and local scales." Fort Future is a research program designed to produce capabilities critical to the Army's ability to transform its installations in the tight timeframe required to support our emerging forces. Much as field commanders gain a superior advantage by visualizing the battlespace, installation planners will be able to make strategic decisions by visualizing results of many different scenarios.

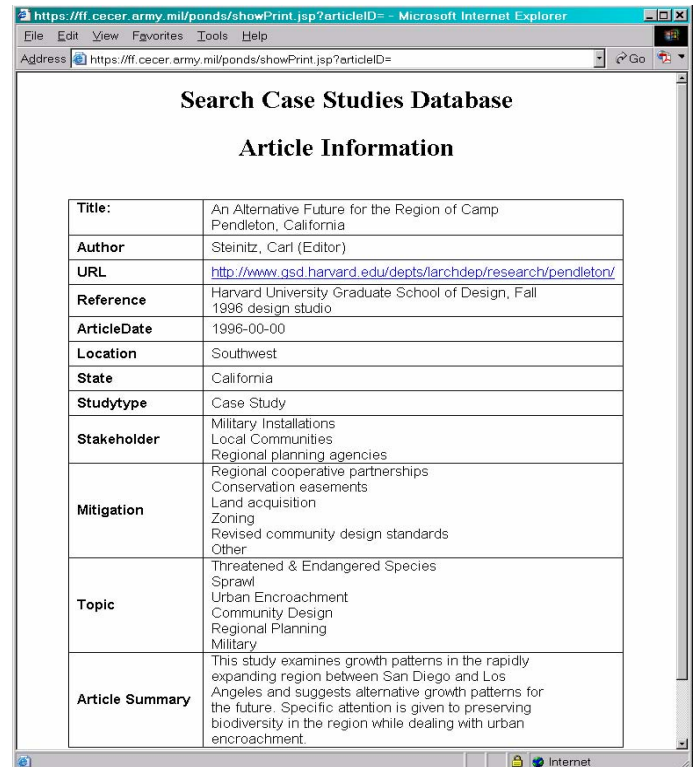




## Application

Anticipated users of PONDS include military installations and local communities that want to learn about resource sharing and partnering or are currently facing land use conflicts. Users can search the database to find previous studies and use them as a base for making decisions in their own locale. Users can also refer to the expert guidelines and links to relevant agencies to find additional tools for fostering partnerships and resolving land use conflicts (e.g., see the sample search results to the right). This tool is useful for installation sustainability planning, regional planning, and local community planning.

Military articles and case studies are particularly useful for installations and nearby communities in resolving land use conflicts that pertain to military land use. Non-military articles can also be used by military installations and nearby communities to help resolve the range of problems that contribute to land use conflicts, such as sprawl. PONDS is designed to encourage community partnering among a wide range of stakeholders and proactive options for resolving land use conflicts. In response to the increasingly dwindling resources in this country, PONDS strives to provide state-of-the-art alternatives for proactively sharing resources, responsible planning and effective land use strategies.



Search Case Studies Database	
Article Information	
Title:	An Alternative Future for the Region of Camp Pendleton, California
Author	Steinitz, Carl (Editor)
URL	<a href="http://www.qsd.harvard.edu/depts/archdep/research/pendleton/">http://www.qsd.harvard.edu/depts/archdep/research/pendleton/</a>
Reference	Harvard University Graduate School of Design, Fall 1996 design studio
ArticleDate	1996-00-00
Location	Southwest
State	California
Studytype	Case Study
Stakeholder	Military Installations Local Communities Regional planning agencies
Mitigation	Regional cooperative partnerships Conservation easements Land acquisition Zoning Revised community design standards Other
Topic	Threatened & Endangered Species Sprawl Urban Encroachment Community Design Regional Planning Military
Article Summary	This study examines growth patterns in the rapidly expanding region between San Diego and Los Angeles and suggests alternative growth patterns for the future. Specific attention is given to preserving biodiversity in the region while dealing with urban encroachment.

**Users can refer to expert guidelines and links to relevant agencies to find additional tools for resolving land use conflicts.**



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Engineer Research and  
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## Contact

U.S. Army Engineer Research and  
Development Center

Suzanne Loechl

Phone: (217) 352-6511, x7397

E-mail: [Suzanne.K.Loechl@erdc.usace.army.mil](mailto:Suzanne.K.Loechl@erdc.usace.army.mil)

Annette Stumpf

Phone: (217) 352-6511, x7542

E-mail: [Annette.L.Stumpf@erdc.usace.army.mil](mailto:Annette.L.Stumpf@erdc.usace.army.mil)

PONDS: <https://ff.cecer.army.mil/ponds/home.htm>

SERM: <http://www.cecer.army.mil/KD/SERM>

Fort Future: <https://ff.cecer.army.mil/ff/>

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## – PONDS –

a web capability to support  
installations & communities  
working together

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